**IT Applications, Unit 4**

**Security and ethical considerations, Ch 8, p 294**

**Emerging technologies, Cloud Computing, p 305**

**The advantages and disadvantages of using cloud computing for storing, communicating and disposing of data and information.**

**What is cloud computing?**

1. Provide a definition for cloud computing?  
   the phrase cloud computing refers to the capacity for businesses to access convenient, up-to-date and on-demand web applcations that can be maintained with minimal effort and financial outlay.

**Implications for businesses**

1. Distinguish between the following types of clouds:
   1. Public cloud  
      a business can access web services via a third party who shares resources and costs on a utility basis.
   2. Community cloud  
      a group of organisations with similar needs seek to share the infrastructure.
   3. Hybrid cloud  
      the business can access a number of cloud services in both a public and community environment.
   4. Private cloud  
      takes advantage of all the strengths of a cloud environment, but is tailored to suit the private client.

**Advantages and disadvantages of using cloud computing**

From the text and also from the Articles:

“Guide to cloud computing”

“Steven Levy on the Perils of Cloud Computing”

**Complete the following:**

**Advantages**

1. List the advantages of this type of computing.  
   Decreases the amount of software licensing and software installation needed to keep computers up to date. Technical staff can be used for other tasks.  
   The cost of accessing applications is often related to the amount of usage, not per user (as is the case in traditional software licensing agreements).  
   Less effort is required to access and trial new software.  
   Software updates occur within the cloud rather than waiting for technical departments to install updates on each desktop or laptop.  
   Businesses can keep their current computers for longer, as most the processing power is accessed through cloud. Access to services can be perceived as more reliable as many cloud computing provides have redundant servers to provide business continuity.  
   Business will require less storage hardware, as the majority of data is stored in the cloud.  
   The storage of data occurs within the cloud. It is distributed across a range of locations and ensures that all is not lost in the event of a disaster.  
   If using the cloud for communication information, then the business will not have to maintain an email server.

**Disadvantages**

1. List the disadvantages of cloud computing.  
   If businesses are dependent on the cloud for their access to the Internet, many will need to install redundant internet connections, so that if one provider has an outage, access will continue through a secondary Internet provider.  
   Security of data is only as good as the security within the cloud, so businesses still need to ensure that passwords are maintained and that they apply privacy principles in the handling and use of data.  
   If using the cloud for communicating data and information, then the business will not have to maintain an email server, but the business will need to be more aware of the use of effective passwords to protect online information.